Staff Workshop on the Preparation of the 2010 Bioenergy Action Plan
December 14, 2010
Appendix A: List of Actions by State Agency

Legislative Options	
5.1. Reauthorization of the California's Renewable Energy Program and the Existing Renewable Facilities Program. The authorization that allows the Energy Commission to collect and expend funds from the Renewable Resource Trust Fund for the Renewable Energy Program will expire on January 1, 2012. The REP provides market-based incentives for existing utility-scale solid fuel biomass and solar thermal facilities through the Existing Renewable Facilities Program. The Energy Commission will introduce or support legislation to extend the expiration dates for the administration of the REP from 2012 to 2017, in Section 399.8 of the Public Utilities Code and Sections 25740.5 and 25742 of Division 15 of the Public Resource Code.	**Lead Agency:** Energy Commission. **Desired Outcome:** Reauthorization of the Renewable Energy Program and the Existing Renewable Facilities Program to support the continued operation and/or increased production at existing solid fuel biomass facilities. **Completion Date:** September 15, 2011.
5.2. Reauthorization of the Energy Commission's Public Interest Energy Research Program (PIER). PIER has funded 41 bioenergy research and development projects and studies, and additional R&D initiatives are called for in this *Action Plan.* The Energy Commission will seek re-authorization of the PIER Program.	**Lead Agency:** Energy Commission. **Desired Outcome:** Reauthorization of the PIER Program. **Completion Date:** December 31, 2011.
5.3. Support for Legislative Changes to the Statutory Definition of MSW Conversion The Energy Commission, in partnership with the Department of Resources Recycling and Recovery, and the Air Resources Board, will continue to assess legislation to amend the definition of MSW conversion in statute, providing a technically accurate description of available conversion technologies that meet California's strict air and water quality standards.	**Lead Agency:** Energy Commission, CalRecycle, ARB. **Desired Outcome:** Remove technology restrictions imposed by statute on the eligibility of conversion of MSW to electricity for the RPS. **Completion Date:** December 31, 2012.
Working Group will collaborate to complete the following actions:	
1.1. Web-Based Portal for Permitting Guidance and Information To assist new project developers with guidance to obtain permits, the Working Group will form a subcommittee to develop a comprehensive Web-based portal for permitting guidance, links, and contacts to permitting agencies.	**Lead Agency:** TBD **Desired Outcome:** Improve developer access to permitting guidance and contact information. **Completion Date:** September 30, 2011.
5.4. Monitor Changes to Federal Bioenergy Policies and Regulations The Working Group will continue to monitor and comment on state and federal regulatory and legislative proposals that will impact the state's ability to meet its bioenergy goals, including but not limited to: 5.4.1. Follow-up on the Governor's and state agencies' comment letter dated August 19, 2010 on U.S. EPA's proposed rule on Maximum Available Control Technology (MACT) for biomass facilities and on U.S. EPA's September 2010 request for comment on the carbon neutrality of biomass for EPA's GHG tailoring rule. 5.4.2. Support federal legislation that allows states to implement feed-in tariffs for renewable energy projects, including bioenergy projects. 5.4.3. Support federal legislation that allows use of woody biomass feedstock harvested sustainability from California from federal lands be eligible feedstock for biofuels. 5.4.4. Support extending federal tax credits for existing solid-fuel biomass facilities and new biomass and biogas facilities. The Working Group will also support development of federal tax credits for biogas injected into natural gas pipeline.	**Lead Agency:** Energy Commission. **Desired Outcome:** Continuous monitoring of federal laws and regulations that may impact state bioenergy goals allowing the state to provide timely comments as issues arise. **Completion Date:** Continuous.

CalRecycle will be the lead the following actions:	
2.4. Web-Based Database of Biodegradable Waste for Codigestion at Wastewater Treatment Plants 2.4.2. CalRecycle will work with the Energy Commission and the California Biomass Collaborative to integrate locations of post-consumer food waste into the Web-based database.	**Desired Outcome:** Extend the scope of the database to include locations of post-consumer food waste in the data set. **Completion Date:** 2012.
2.6. Support Deployment of Anaerobic Digestion Projects 2.6.1. CalRecycle will prepare a Program Anaerobic Digestion Environmental Impact Report. 2.6.2. CalRecycle will participate in the Technical Advisory group of the Central Valley Regional Water Quality Control Board's Statewide Program Environmental Impact Report for Anaerobic Digestion facilities. 2.6.3. CalRecycle will participate in the Advisory Committee for the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program (AB 118). 2.6.4. CalRecycle will provide technical reviews of relevant AD project proposals submitted under the AB 118 program. 2.6.5. CalRecycle will work with the Air Resources Board to incorporate AD into the state's Low Carbon Fuel Standard. 2.6.6. CalRecycle will work with the California Pollution Control Financing Authority to help anaerobic digestion project proposals obtain funding. 2.6.7. CalRecycle will work with the California Biomass Collaborative to provide technical support for anaerobic digestion projects. 2.6.8. CalRecycle will participate on technical workgroups convened by the Climate Action Reserve to develop or modify protocols, such as the Organic Waste Digestion Project Protocol, for projects that divert and digest organic waste that otherwise would have gone to solid waste landfills. 2.6.9. CalRecycle will update guidance documents that outline how CalRecycle regulations are applied to AD and the statutory requirements that CalRecycle and Local Enforcement agencies have regarding AD when solid waste is used as a feedstock.	**Desired Outcome:** Reduce by the amount of organic waste disposed in the state's landfills by promoting in-state development of biofuels and bioenergy projects. **Completion Date:** December 31, 2012.
3.5. Funding for Advanced Biofuels and Renewable Energy Facilities CalRecycle's Recycling Market Development Zones program may provide low interest loans to develop biofuels and renewable electricity using waste materials diverted from landfills.	**Desired Outcome:** Increase the awareness of low-interest loan financing available through CalRecycle. **Completion Date:** December 31, 2012.
Air Resources Board will be the lead the following actions:	
1.3. Funding for New Fuel Source Testing To offset the cost for source testing, the Air Resources Board, with the Energy Commission, will conduct a stakeholder process to identify "new" biomass feedstocks for conversion technologies and seek funding to support source testing for distributed generators. Source test data would be made available to local air districts.	**Desired Outcome:** Reduce cost-of-compliance to small developers that use new feedstocks or technologies. **Completion Date:** June 30, 2012.
1.4. AB 1318 – Wildfire Emissions Offset Credits for PM The Air Resources Board will work with the California Energy Commission, Cal Fire, U.S. Forest Service, and local air pollution control districts to evaluate forest health and hazardous fuels reductions programs as a non-traditional and innovative source of PM ERCs in the SCAQMD and other non-attainment areas of California.	**Desired Outcome:** Additional PM ERCs in the South Coast AQMD. **Completion Date:** June 30, 2012.
2.5. Increase Energy Production From Urban Derived Biomass 2.5.3. The Energy Commission, in partnership with the Department of Resources Recycling and Recovery, and the Air Resources Board will provide technical review of proposed legislation that refines or removes the definition of MSW conversion and biomass conversion in statute.	**Lead Agencies:** Energy Commission, CalRecycle, ARB. **Desired Outcome:** Provide technical review of proposed legislation that will allow technologies that convert post-recycled material into electricity to be eligible for the RPS and eliminate technology restrictions in statute. **Completion Date:** December 31, 2012.

CalFire and the Board of Forestry and Fire Protection will be the lead the following actions:	
2.2. Increase Use of Forest Biomass Harvested for Wildfire Fuel Reduction The Board of Forestry and Fire Protection is developing a Modified Timber Harvest Plan (THP) for Fuels Management, which prescribes standards for harvesting forest fuels that landowners can use to facilitate plan preparation and regulatory compliance. Cal Fire administers this THP process. The Board and Cal Fire are developing the Modified THP with input from other agencies, such as the Department of Fish and Game, to ensure that biomass fuel harvest activities protect the environment and are sustainable.	**Lead Agency:** Board of Forestry and Fire Protection. **Desired Outcome:** A modified timber harvest plan that will increased access to affordable and readily available feedstock from wildfire hazard reduction and forest health activities. **Completion Date:** December 31, 2011
2.3. Public Education and Outreach The Board of Forestry and Fire Protection and Cal Fire will provide training workshops for Cal Fire staff to implement the 2010 Strategic Fire Plan to assist communities, local agencies and citizen groups such as Fire Safe Councils in reducing wildfire hazards and damages, including hazardous fuel removal. Trainings will improve identification of priority areas for fuels treatments and education about wood biomass treatments.	**Lead Agency:** Cal Fire. **Desired Outcome:** Increased treatment of priority hazardous fuels which will improve community safety and forest health while generating woody biomass waste materials for energy production. **Completion Date:** December 31, 2011.
CPUC will be the lead the following actions:	
1.2. Address Interconnection Challenges for Bioenergy-Based Distributed Generation The Public Utilities Commission will work with the Energy Commission to review the Rule 21 tariff interconnection processes for bioenergy projects. The Public Utilities Commission has indicated that Rule 21 issues will be handled in Rulemaking (R) 10-05-004. There may be a need to convene stakeholders to discuss the specific interconnection issues that affect bioenergy projects.	**Desired Outcome:** Streamline interconnection processes for developers of bioenergy distributed generation projects. **Completion Date:** December 31, 2012.
3.1. Ensure Continued Operation of Existing Biomass Facilities After Contract Expiration 3.1.2. The Public Utilities Commission will work with the utilities and existing solid-fuel biomass facilities to ensure streamlined, quick, and fair processes through which they may renegotiate expiring contracts.	**Desired Outcome:** Renegotiated contracts that provide for the continued operation and/or increased production at existing solid fuel biomass facilities. **Completion Date:** December 31, 2012.
3.3. Implementation of Feed-In Tariffs for Renewable Projects The Public Utilities Commission will continue to work on implementing and expanding feed-in tariffs for renewable energy projects through implementation of the SB 32 feed-in tariff and the proposed Renewable Auction Mechanism for projects up to 20 MW.	**Desired Outcome:** Streamlined procurement mechanism for new and repowered bioenergy facilities. **Completion Date:** December 31, 2012.
4.1. Coordinate Efforts to Increase the Beneficial Use of Biogas 4.1.2. Public Utilities Commission will work with the Energy Commission to examine whether additional gas quality standards should be adopted for biogas injected into utility natural gas pipelines. Preliminary joint CPUC/Energy Commission investigation into whether additional quality standards are needed and if a formal CPUC proceeding should be undertaken. If it is determined that a CPUC proceeding should be initiated and if it begins in 2011, the CPUC proceeding adopting new quality standards based upon preliminary investigation might be completed by the end of 2012.	**Desired Outcome:** A set of policies, procedures and standards for injecting biogas into natural gas pipelines. **Completion Date:** June 30, 2011 (Preliminary investigation)
4.2. Evaluation of the Public Interest Natural Gas Research and Development Program In CPUC decision (D) 04-08-010, the CPUC designated the Energy Commission as the administrator of the public interest natural gas research and development program, which is funded by utility ratepayers. Under D.04-08-010, CPUC staff has recently begun an investigation and evaluation of the program. CPUC staff expects that this effort will result in the CPUC determining whether the program should continue or be modified, what the ongoing budget should be, and whether the Energy Commission should continue as administrator.	**Desired Outcome:** Continued research, development, and demonstration concerning biogas. **Completion date:** December 31, 2011.

Energy Commission will be the lead the following actions:	
1.5. Revisit Restrictions on the Injection of Biomethane Derived from Landfill Gas The Energy Commission, Air Resources Board, CalRecycle, and Public Utilities Commission will work with California gas utilities through a public process to address and resolve barriers to introducing landfill gas into the California natural gas pipeline.	**Desired Outcome:** Increased use of landfill gas. **Completion Date:** December 31, 2012.
2.1. Sustainability Standards for Biomass Feedstock Sourcing The Energy Commission, Air Resources Board and Cal Fire will continue to work with the Interagency Forestry Working Group to assess and define sustainability standards for biomass feedstock sourcing.	**Desired Outcome:** State standards defining sustainability that can be used to identify sustainable sources of biomass feedstock. **Completion Date:** December 31, 2012.
2.4. Web-Based Database of Biodegradable Waste for Codigestion at Wastewater Treatment Plants 2.4.1. The Energy Commission's Public Interest Energy Research (PIER) Program will commit research dollars and work with the California Biomass Collaborative, the Department of Food and Agriculture, and industry associations to update and renew an existing Web-based database to provide location, volume, quality, and seasonality of biodegradable waste suitable for codigestion at wastewater treatment plants. The database will include waste from California's agriculture, food processing, and dairy industries. 2.4.2. CalRecycle will work with the Energy Commission and the California Biomass Collaborative to integrate locations of post-consumer food waste into the Web-based database.	**Desired Outcome:** Updated and accessible public data source for regional operators to determine feedstock locations and seasonal variations. **Completion Date:** December 31, 2012.
2.5. Increase Energy Production From Urban Derived Biomass 2.5.1. The Energy Commission will work with CalRecycle to determine if urban derived biomass (the organic fraction of solid waste not derived from fossil fuel) separated from municipal solid waste can be considered biomass for the RPS. If necessary, the Energy Commission will clarify biomass eligibility in the *Renewables Portfolio Standard Eligibility Guidebook.*	**Desired Outcome:** Clarify RPS eligibility guidelines that readily identifiable and separable biomass feedstock that may have entered the waste stream is an RPS eligible feedstock. **Completion Date:** June 30, 2011.
2.5.2. The Energy Commission will continue to work with CalRecycle to determine if the remaining organic fraction of municipal solid waste should be considered biomass for the purposes of the RPS and, if necessary, identify changes to statute and/or regulation to allow the use in the RPS.	**Desired Outcome:** Allow the organic fraction of MSW not derived from fossil fuel that is recovered and converted to electricity to be eligible for RPS credits. **Completion Date:** December 31, 2012.
2.5.3. The Energy Commission, in partnership with the Department of Resources Recycling and Recovery, and the Air Resources Board will provide technical review of proposed legislation that refines or removes the definition of MSW conversion and biomass conversion in statute.	**Lead Agencies:** Energy Commission, CalRecycle, ARB. **Desired Outcome:** Provide technical review of proposed legislation that will allow technologies that convert post-recycled material into electricity to be eligible for the RPS and eliminate technology restrictions in statute. **Completion Date:** December 31, 2012.
3.1. Ensure Continued Operation of Existing Biomass Facilities After Contract Expiration 3.1.1. The Energy Commission will explore options to ensure that existing biomass facilities continue to operate through the continuation of the Existing Renewable Facilities Program. However, contract renegotiations must be considered as a long-term solution.	**Desired Outcome:** Continued operation and/or increased production at existing solid fuel biomass facilities. **Completion Date:** December 31, 2012.
3.2. Alternative Fuel Investment Plan As part of California's Alternative Fuels Investment Plan, the Energy Commission will do the following: 3.2.1. The Energy Commission will allocate funding through fiscal year 2011 to support feasibility studies for low-carbon cellulosic ethanol feedstock, including feasibility studies of modifications to existing plants. 3.2.2. The Energy Commission will fund research to improve conversion efficiencies of cellulosic biofuels derived from straw, corn stover, timber processing residues, and the organic fraction of MSW.	**Desired Outcome:** Research results that will lead to reduce cost and greater efficiencies for advanced biofuel technologies. **Completion Date:** December 31, 2012.

3.4. Funding for Integrated Biorefineries The Energy Commission's Public Interest Energy Research Renewable-Based Energy Secure Communities program will provide grants focusing on projects that capitalize on the synergies of colocating biopower or biofuel refineries with other biomass to energy projects, manufacturing facilities, or waste disposal projects.	**Desired Outcome:** Leverage public and private funding to reduce the cost of business and industry development and increase development of biomass markets, especially through co-locating bio-based energy facilities with manufacturing, composting, recycling or waste facilities. **Completion Date:** December 31, 2012.
4.1. Coordinate Efforts to Increase the Beneficial Use of Biogas 4.1.1. The Energy Commission, through the Alternative Fuels Investment Plan, will provide funding for research to reduce the cost of biomethane gas clean up to meet gas quality standards for use as a transportation fuel or injection into the natural gas pipeline.	**Desired Outcome:** A set of policies, procedures and standards for injecting biogas into natural gas pipelines. **Completion Date:** December 31, 2012.